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| L Number | Hits                     | Search Text   | DB        | Time stamp       |
|----------|--------------------------|---|-----------|------------------|
| -        | 1                        | ("20020145832").PN.                                   | USPAT;    | 2004/10/21       |
|          |                          |   | US-PGPUB; | 07:46            |
|          |                          |   | EPO; JPO  |                  |
| -        | 1                        | ("20020075586").PN.                                   | USPAT;    | 2004/10/19 14:18 |
|          |                          |   | US-PGPUB; |                  |
|          |                          |   | EPO; JPO  |                  |
| -        | 62                       | seigler.in.   | USPAT;    | 2004/10/19       |
|          |                          |   | US-PGPUB; | 14:20            |
| 1        | _                        |   | EPO; JPO  |                  |
| -        | (11)                     | (data adj storage adj (device or apparatus or system) | USPAT;    | 2004/10/19 14:31 |
|          | $\bigcirc$               | near5 stabiliz\$3)                                    | US-PGPUB; |                  |
|          |                          |   | EPO; JPO  |                  |
| -        | $\mathbf{G}$             | ((record\$3 or read) adj head same perpendicular adj  | USPAT;    | 2004/10/19       |
|          |                          | record\$3 same noise adj reduc\$4)                    | US-PGPUB; | 14:37            |
|          |                          |   | EPO; JPO  |                  |
| -        | 398                      | ((record\$3 or read) adj head same perpendicular adj  | USPAT;    | 2004/10/19       |
|          |                          | record\$3)  | US-PGPUB; | 14:38            |
|          |                          |   | EPO; JPO  |                  |
| -        | (L)                      | (((record\$3 or read) adj head same perpendicular adj | USPAT;    | 2004/10/19       |
|          |                          | record\$3)) and stabilizer                            | US-PGPUB; | 14:44            |
|          |                          |   | EPO; JPO  |                  |
| -        | (40)                     | perpendicular adj3 record\$3 same magnetic adj data   | USPAT;    | 2004/10/19       |
|          | _                        |   | US-PGPUB; | 14:52            |
|          |                          |   | EPO; JPO  |                  |
| -        | 332                      | data adj storage adj (apparatus or device or system   | USPAT;    | 2004/10/19       |
|          |                          | or medium) same probe                                 | US-PGPUB; | 14:55            |
|          |                          |   | EPO; JPO  |                  |
| -        | 13                       | (data adj storage adj (apparatus or device or system  | USPAT;    | 2004/10/19       |
|          |                          | or medium) same probe) and (read adj (head or         | US-PGPUB; | 14:58            |
|          |                          | transducer))  | EPO; JPO  |                  |
| -        | @ <sub>/</sub>           | perpendicular near5 write adj head                    | USPAT;    | 2004/10/19 15:11 |
| İ        | <u> </u>                 | ·   | US-PGPUB; |                  |
|          |                          |   | EPO; JPO  |                  |
| -        | <b>(</b> 42 <sup>'</sup> | ("2840440"   "4138702"   "4317148"   "4410603"        | USPAT     | 2004/10/19       |
|          |                          | "4423450"   "4438471"   "4541026"   "4546398"         |           | 15:02            |
|          |                          | "4575777"   "4613918"   "4629660"   "4649449"         |           |                  |
|          |                          | "4652956"   "4656546"   "4725909"   "4731157"         |           |                  |
|          |                          | "4742413"   "4751598"   "4771350"   "4803581"         |           |                  |
|          |                          | "4897749"   "4943882"   "4974110"   "5057957"         |           |                  |
|          |                          | "5073836"   "5075280"   "RE33949"   "5195005"         |           |                  |
|          |                          | "5196976"   "5225953"   "5311386"   "5333086"         |           |                  |
| 1        |                          | "5396391"   "5436779"   "5738927"   "5815342"         |           |                  |
|          |                          | "5815909"   "5920449"   "5942342"   "6008969"         |           |                  |
|          | ^                        | "6531202"   "6574072").PN.                            |           |                  |
| -        | <b>(</b> 9`              | (((elongated adj3 probe) or (permanent adj magnet adj | USPAT;    | 2004/10/19       |
|          |                          | leg) or (ferromagnetic adj pole)) same back adj gap)  | US-PGPUB; | 15:24            |
|          |                          | J, v, J   | EPO; JPO  |                  |
| -        | 14                       | ("4539616"   "4636897"   "4651248"   "4751599"        | USPAT     | 2004/10/19 15:19 |
|          |                          | "4881144"   "5032944"   "5198949"   "5241440"         |           |                  |
|          |                          | "5486968"   "5515221"   "5606478"   "5621596"         |           |                  |
|          |                          | "5798897"   "5812350").PN.                            |           |                  |

| - | (16)   | ("5018038"   "5155646"   "5157570"   "5684660"   "5793577"   "5909346"   "5995342"   "5996213"   "6008969"   "6043959"   "6055138"   "6259583"   "6317288"   "6333841"   "6483665"   "6525903"   "2001/0012177"   "2002/0024776"   "2002/0041465"   "2003/0053252").PN. | USPAT                           | 2004/10/19<br>15:20 |
|---|--------|---|---------------------------------|---------------------|
| - | 8      | (((elongated adj3 probe) or (permanent adj magnet adj leg) or (ferromagnetic adj pole)) same read adj head)   | USPAT;<br>US-PGPUB;<br>EPO; JPO | 2004/10/19<br>15:26 |
| - | 30     | (write and read) adj head same underlayer   | USPAT;<br>US-PGPUB;<br>EPO; JPO | 2004/10/19<br>15:36 |
| - | 20     | ("4170033"   "4623867"   "4972286"   "5142425"   "5247413"   "5272582"   "5491600"   "5491605"   "5539598"   "5557492"   "5663856"   "5757591"   "5761009"   "5764446"   "5829702"   "5850324"   "5978181"   "6081409"   "6160688"   "6330123").PN.                     | USPAT                           | 2004/10/19<br>15:32 |
| - | 417603 | (((dis\$1 hard) near2 (drive apparatus)) HDA HDD<br>DASD RAID (magnetic storage drive\$1 assembly)<br>near2 (disk\$5 disc\$1 media medium) (storage near2<br>drive\$1))   | USPAT;<br>US-PGPUB;<br>EPO; JPO | 2004/10/19<br>15:47 |
| - | 58     | ((((dis\$1 hard) near2 (drive apparatus)) HDA HDD<br>DASD RAID (magnetic storage drive\$1 assembly)<br>near2 (disk\$5 disc\$1 media medium) (storage near2<br>drive\$1))) and (read adj head same underlayer)   | USPAT;<br>US-PGPUB;<br>EPO; JPO | 2004/10/19<br>15:42 |
| - | (281   | ((((dis\$1 hard) near2 (drive apparatus)) HDA HDD<br>DASD RAID (magnetic storage drive\$1 assembly)<br>near2 (disk\$5 disc\$1 media medium) (storage near2<br>drive\$1))) and (yoke adj assembly)   | USPAT;<br>US-PGPUB;<br>EPO; JPO | 2004/10/19<br>15:45 |
| - | 1      | ("6134080").PN.   | USPAT;<br>US-PGPUB;<br>EPO; JPO | 2004/10/19 15:51    |
| - | 11     | 6134080.URPN.   | USPAT                           | 2004/10/19<br>15:50 |
| - | 11     | 6134080.URPN.   | USPAT                           | 2004/10/21 10:33    |
|   | (37    | read\$3 adj head near5 assembly same data adj<br>storage  | USPAT;<br>US-PGPUB;<br>EPO; JPO | 2004/10/19<br>15:52 |
| - | 3      | ("4532802"   "4670732"   "5680265").PN.   | USPAT                           | 2004/10/19<br>15:55 |
| - | 1439   | 360/57,313,317,327,327.22,327.23.ccls.  | USPAT;<br>US-PGPUB;<br>EPO; JPO | 2004/10/20<br>08:41 |
| - | 1      | ("5486967").PN.   | USPAT;<br>US-PGPUB;<br>EPO; JPO | 2004/10/20<br>08:35 |
| - | 1      | ("5636093").PN.   | USPAT;<br>US-PGPUB;<br>EPO; JPO | 2004/10/20<br>08:36 |
| - | 1      | ("5695864").PN.   | USPAT;<br>US-PGPUB;<br>EPO; JPO | 2004/10/20<br>08:36 |

| - | 1                          | ("5815342").PN.  | USPAT;    | 2004/10/20 |
|---|----------------------------|--|-----------|------------|
|   |                            |  | US-PGPUB; | 08:38      |
|   |                            |  | EPO; JPO  |            |
| - | 1                          | ("6188549").PN.  | USPAT;    | 2004/10/20 |
|   |                            |  | US-PGPUB: | 08:38      |
|   |                            | 4  | EPO; JPO  |            |
| _ | 4385                       | 360/57,123,121,97,01,313,317,327,327.22,327.23.ccls.   | USPAT;    | 2004/10/20 |
|   |                            |  | US-PGPUB; | 09:39      |
|   |                            |  | EPO; JPO  |            |
| _ | 1                          | ("6249407").PN.  | USPAT;    | 2004/10/20 |
|   | •                          | (0215107).114.   | US-PGPUB; | 08:43      |
|   |                            |  | EPO; JPO  | 00.43      |
| _ | 1                          | ("6381094").PN.  | USPAT;    | 2004/10/20 |
|   | 1                          | ( 0301094 ).FIV.                                       |           |            |
|   |                            |  | US-PGPUB; | 08:44      |
|   |                            | (1150 423 431) 0) )                                    | EPO; JPO  | 00044040   |
| - | 1                          | ("5942342").PN.  | USPAT;    | 2004/10/20 |
|   |                            |  | US-PGPUB; | 08:47      |
|   |                            | ,                | EPO; JPO  |            |
| - | 2562                       | perpendicular near65 ((record\$4 or writ\$4) adj head) | USPAT;    | 2004/10/20 |
|   |                            |  | US-PGPUB; | 08:47      |
|   |                            |  | EPO; JPO  | 1          |
| - | 12739                      | read adj head  | USPAT;    | 2004/10/20 |
|   |                            |  | US-PGPUB; | 08:48      |
|   |                            |  | EPO; JPO  |            |
| - | 320                        | (perpendicular near65 ((record\$4 or writ\$4) adj      | USPAT;    | 2004/10/20 |
|   |                            | head)) and (read adj head)                             | US-PGPUB; | 08:48      |
|   |                            |  | EPO; JPO  |            |
| - | <b>(</b> 95 <sup>1</sup> ) | ((perpendicular near65 ((record\$4 or writ\$4) adj     | USPAT;    | 2004/10/20 |
|   |                            | head)) and (read adj head)) and bias                   | US-PGPUB; | 08:53      |
|   |                            |  | EPO; JPO  |            |
| - | 11453                      | perpendicular adj4 (medium or dis\$1)                  | USPAT;    | 2004/10/20 |
|   |                            |  | US-PGPUB; | 08:55      |
|   |                            | ·  | EPO; JPO  |            |
| - | 434                        | soft near8 underlayer                                  | USPAT;    | 2004/10/20 |
|   |                            |  | US-PGPUB; | 08:56      |
|   |                            |  | EPO; JPO  |            |
| - | (297                       | (perpendicular adj4 (medium or dis\$1)) and (soft      | USPAT;    | 2004/10/20 |
|   |                            | near8 underlayer)                                      | US-PGPUB; | 08:57      |
|   |                            |  | EPO; JPO  |            |
| - | (88)                       | ((perpendicular adj4 (medium or dis\$1)) and (soft     | USPAT;    | 2004/10/20 |
|   |                            | near8 underlayer)) and (read adj (sensor or head))     | US-PGPUB; | 09:04      |
|   |                            | ,  | EPO; JPO  | ·          |
| - | 1                          | 5764445.pn.  | USPAT;    | 2004/10/20 |
|   |                            |  | US-PGPUB; | 09:05      |
|   |                            |  | EPO; JPO  |            |
| - | 1                          | 6064552.pn.  | USPAT;    | 2004/10/20 |
|   | [·                         |  | US-PGPUB; | 09:07      |
|   |                            |  | EPO; JPO  |            |
| _ | 1                          | 5668688.pn.  | USPAT;    | 2004/10/20 |
|   | •                          |  | US-PGPUB; | 09:30      |
|   |                            |  | EPO; JPO  | 37.30      |
| _ | 812                        | ((read or reproduc\$3) adj head same (write or         | USPAT;    | 2004/10/20 |
|   | UI2                        | record\$3) adj head) same assembly                     | US-PGPUB; | 09:31      |
|   |                            | Tecor apo) and nearly sume assembly                    | EPO; JPO  | 09.31      |
|   |                            |  | <u> </u>  | l .        |

| -              | (59      | ,(((read or reproduc\$3) adj head same (write or       | USPAT;    | 2004/10/20 |
|----------------|----------|--|-----------|------------|
|                |          | record\$3) adj head) same assembly) and                | US-PGPUB; | 09:32      |
|                |          | (perpendicular adj4 (medium or dis\$1))                | EPO; JPO  |            |
| -              | 643      | 360/324.1, 324.2.ccls.                                 | USPAT;    | 2004/10/20 |
|                |          |  | US-PGPUB; | 09:40      |
|                |          |  | EPO; JPO  |            |
| _              | 424      | (360/324.1, 324.2.ccls.) and magnetic adj head         | USPAT;    | 2004/10/20 |
|                | ,_,      | (000) 32 4.1, 32 4.2.ccis.) and magnetic day need      | US-PGPUB; | 09:40      |
|                |          |  | EPO; JPO  | 09.40      |
|                | (23)     | ((360/3341, 3343 and ) and magnetic adi haad) and      | USPAT;    | 2004/10/20 |
| -              |          | ((360/324.1, 324.2.ccls.) and magnetic adj head) and   | US-PGPUB: | 09:52      |
|                |          | probe  | 1         | 09.52      |
|                | 35055    |  | EPO; JPO  | 2004/10/20 |
| -              | 35055    | read near4 sensor                                      | USPAT;    | 2004/10/20 |
|                |          |  | US-PGPUB; | 09:52      |
|                |          |  | EPO; JPO  |            |
| <del>-</del> . | 218      | (perpendicular near65 ((record\$4 or writ\$4) adj      | USPAT;    | 2004/10/20 |
|                |          | head)) and (read near4 sensor)                         | US-PGPUB; | 09:53      |
|                |          |  | EPO; JPO  |            |
| -              | 749      | (read adj3 sensor) near "40" bias\$5 adj15 (soft adj6  | USPAT;    | 2004/10/20 |
|                |          | magnetic)  | US-PGPUB; | 09:59      |
|                |          |  | EPO; JPO  |            |
| -              | (14      | ((soft near9 underlayer) and sensor near15 ((bias\$3   | USPAT;    | 2004/10/20 |
|                |          | adj8 field) or (field adj8 bias\$3))) and (read near5  | US-PGPUB; | 10:02      |
|                |          | sensor)  | EPO; JPO  |            |
| -              | (19      | ((soft near9 underlayer) and sensor near15 ((bias\$3   | USPAT;    | 2004/10/20 |
|                |          | adj8 field) or (field adj8 bias\$3)))                  | US-PGPUB; | 10:02      |
|                | _        |  | EPO; JPO  |            |
| -              | (25      | ("5546253"   "5583727"   "5585986"   "5633770"         | USPAT     | 2004/10/20 |
|                |          | "5738938"   "5750270"   "5809637"   "5850326"          |           | 10:04      |
|                |          | "5909340"   "5976660"   "6029339"   "6104632"          |           |            |
|                |          | "6111406"   "6117282"   "6122150"   "6125019"          |           | 1          |
|                |          | "6212047"   "6307707"   "6319622"   "6320725"          |           |            |
|                |          | "6436526"   "6456465"   "6469873"   "6567246"          |           |            |
|                |          | "6621664").PN.   |           |            |
| _              | 1        | ("6134080").PN.  | USPAT;    | 2004/10/20 |
|                |          |  | US-PGPUB; | 10:56      |
|                |          |  | EPO; JPO  |            |
| -              | 1        | ("6249407").PN.  | USPAT;    | 2004/10/20 |
|                |          |  | US-PGPUB; | 12:50      |
|                |          |  | EPO; JPO  |            |
| -              | 2        | ("4222084"   "4317148").PN.                            | USPAT     | 2004/10/20 |
|                |          | (  | 00,71     | 14:50      |
| _              | 10       | 4222084.URPN.  | USPAT     | 2004/10/20 |
|                | 10       | ILLEGOT, ON 14.  | USEAT     | 14:51      |
| 1_             | 4        | 6008969.URPN.  | LICDAT    | 2004/10/20 |
| 1              |          | 0000303.UNI IN.  | USPAT     | 14:51      |
| 1_             | 1        | "5228184".PN.  | LICDAT    | i i        |
| -              | '        | SECOLUT IFIN.  | USPAT     | 2004/10/20 |
| 1_             | 42       | (vales need) (aggemble att)                            | LICDAT:   | 14:55      |
| -              | 44       | (yoke near9 (assembly or strucuture) same (record\$4   | USPAT;    | 2004/10/20 |
|                |          | or writ\$4) adj head)                                  | US-PGPUB; | 15:01      |
|                | <u>۾</u> | // // A  | EPO; JPO  | 2004/10/20 |
| -              | (9)      | ((record\$4 or writ\$4) adj head) near20 inside near20 | USPAT;    | 2004/10/20 |
|                |          | (yoke adj assembly or poles)                           | US-PGPUB: | 15:02      |
|                |          |  | EPO; JPO  |            |

|              | 1423             | (tt.   | USPAT;    | 2004/10/21         |
|--------------|------------------|--|-----------|--------------------|
| -            | 1423             | (write adj head) near20 (probe or pole)                | · ·       | 2004/10/21         |
|              |                  |  | US-PGPUB; | 07:47              |
|              |                  |  | EPO; JPO  |                    |
| -            | 247              | ((write adj head) near20 (probe or pole)) and          | USPAT;    | 2004/10/21         |
|              |                  | (perpendicular near9 record\$3)                        | US-PGPUB; | 07:59              |
|              |                  |  | EPO; JPO  |                    |
| -            | 441              | piggyback near5 head                                   | USPAT;    | 2004/10/21         |
|              |                  |  | US-PGPUB; | 08:30              |
|              |                  |  | EPO; JPO  |                    |
| -            | 422              | (piggyback near5 head) and (probe or pole)             | USPAT;    | 2004/10/21         |
|              |                  | (1 33)   | US-PGPUB; | 08:31              |
|              |                  |  | EPO; JPO  |                    |
| -            | (15)             | ((piggyback near5 head) and (probe or pole)) and       | USPAT;    | 2004/10/21         |
|              |                  | (perpendicular adj record\$3)                          | US-PGPUB; | 08:31              |
|              | _                | (per periorcular daj recor apo)                        | EPO; JPO  | 00.31              |
|              | 109,             | (w   | USPAT;    | 2004/10/21 11:48   |
| <del>-</del> | (109)            | (magnetic adj head) near5 probe                        |           | 2004/10/21 11:48   |
|              |                  |  | US-PGPUB; |                    |
|              |                  |  | EPO; JPO  | 00044045444        |
| -            | 282              | (probe or pole) near20 (trapezoid\$2 adj4 shape)       | USPAT;    | 2004/10/21 11:42   |
|              | 1                |  | US-PGPUB; |                    |
|              |                  |  | EPO; JPO  |                    |
| -            | (14)             | ((probe or pole) near20 (trapezoid\$2 adj4 shape)) and | USPAT;    | 2004/10/21 11:33   |
|              |                  | (perpendicular adj record\$3)                          | US-PGPUB; |                    |
|              |                  |  | EPO; JPO  |                    |
| -            | (56 <sup>)</sup> | ((probe or pole) near20 (trapezoid\$2 adj4 shape)) and | USPAT;    | 2004/10/21 11:42   |
|              |                  | (magnetic adj3 head)                                   | US-PGPUB; |                    |
| 1            |                  |  | EPO: JPO  |                    |
| _            | 9                | (probe or pole) near20 (reverse\$3 near5 trapezoid\$2  | USPAT;    | 2004/10/21 11:46   |
|              |                  | adj4 shape)  | US-PGPUB; | 200 1/10/21 11: 10 |
|              |                  | aug i shape)   | EPO; JPO  |                    |
| _            | 12               | (probe or pole) same (reverse\$3 same trapezoid\$2     | USPAT;    | 2004/10/21 11:46   |
|              | 12               | adj4 shape)  | US-PGPUB; | 2004/10/21 11:40   |
|              |                  | auja shape)  | i ·       |                    |
|              | 2                | //   | EPO; JPO  | 2004/10/21 11:40   |
| -            |                  | ((magnetic adj head) near5 probe) and (trapezoid\$2    | USPAT;    | 2004/10/21 11:48   |
|              |                  | near20 shape)  | US-PGPUB; |                    |
|              |                  |  | EPO; JPO  | 0004/15/55         |
| -            | 10005            | probe near20 head                                      | USPAT;    | 2004/10/22         |
|              |                  |  | US-PGPUB; | 09:29              |
|              |                  |  | EPO; JPO  |                    |
| -            | 75               | (probe near20 head) and perpendicular adj record\$3    | USPAT;    | 2004/10/22         |
|              |                  |  | US-PGPUB; | 09:49              |
|              |                  |  | EPO; JPO  |                    |
| -            | 1                | ("5454158").PN.  | USPAT;    | 2004/10/22         |
|              |                  |  | US-PGPUB; | 10:04              |
|              |                  | · ·  | EPO; JPO  |                    |
|              | 13               | ("4722073"   "5171992"   "5266897"   "5343422"         | USPAT     | 2004/10/22         |
|              |                  | "5347485"   "5361226"   "5432734"   "5436448"          |           | 09:52              |
|              |                  | "5448515"   "5449935"   "5454158"   "5465046"          |           |                    |
|              |                  | "5486963").PN.   |           |                    |
| _            | 9                | 5900728.URPN.  | USPAT     | 2004/10/22         |
|              |                  | 07007 80.013 14.                                       | 001701    |                    |
| _            | 86               | /<br>/ (cone or pyramid or trapezoid\$2) adj probe     | LICDAT    | 09:56              |
| -            |                  | r (cone or pyramia or mapezolapz) daj probe            | USPAT;    | 2004/10/22         |
|              |                  |  | US-PGPUB; | 10:16              |
| L            |                  |  | EPO; JPO  |                    |

| - | 1 | ((cone or pyramid or trapezoid\$2) adj probe) and | USPAT;    | 2004/10/22       |
|---|---|---|-----------|------------------|
|   |   | perpendicular adj record\$3                       | US-PGPUB; | 10:16            |
| İ |   |   | EPO; JPO  |                  |
| - | 1 | 5436448.pn.                                       | USPAT;    | 2004/10/22 11:01 |
|   |   | •   | U5-PGPUB; |                  |
|   |   |   | EPO; JPO  |                  |
| - | 0 | 20030137779.URPN.                                 | USPAT     | 2004/10/22       |
|   |   |   |           | 11:35            |